

**TRAINING OUTLINE**

**for**

**BAC DATAMASTER**

**INFRARED BREATH TEST INSTRUMENT**

**OPERATOR REFRESHER**

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By 

Barry K. Logan, Ph.D.  
Washington State Toxicologist

Prepared By

Washington State Patrol Breath Test Section

# LESSON PLAN

## **REFRESHER COURSE FOR DATAMASTER AND PBT OPERATOR**

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Prepared by Washington State Patrol  
Breath Test Section

To be presented in 4 hours.

### **INSTRUCTIONAL OBJECTIVES**

1. To refresh the student's skill in operating the DataMaster.
2. To upgrade the student's certified operator status of the DataMaster.
3. To acquaint the student with techniques that help to achieve an admissible test result.
4. To assist the student to prepare to testify in court regarding DataMaster tests.
5. To provide an opportunity for the student to have practice using the DataMaster.
6. To test the student's knowledge of DataMaster procedures and ability to conduct an admissible test.
7. To understand the purpose, principles, and operation of the simulator.
8. To know the legal applications of the instruments.
9. To refresh the students with the nomenclature, theory and legal aspects of the PBT.
10. The student will successfully complete a written examination (80 percent minimum) and successfully perform a practical test on both the DataMaster and the PBT.

## TRAINING AIDS

1. White/Black board
2. Training instruments
3. Breath test forms/documents
4. Data entry code books
5. DataMaster Operator's Manual
6. Blood vial kit and gloves
7. Practical exercises/training forms
8. AlcoSensor (PBT) with mouthpieces

## EXAMINATION:

1. Written exam - 80%
2. Practical exercise - Pass/Fail.

## PRE-INSTRUCTION

1. Verify students are not over 90 days past their DataMaster card expiration date, no exceptions
2. Have a class roster filled out
3. Written exam, pass/fail practical

## I. INTRODUCTION

- A. This outline will refresh the student on operation of the DataMaster and the PBT.
- B. The DataMaster is a state of the art forensic breath test instrument that uses infrared spectroscopy to analyze a sample of human breath for ethanol concentration.
  - 1. Measures ethanol directly
  - 2. Instrument detects numerous possible problems and aborts the test. It is designed to give a proper test or none at all.
    - a. Observation time is not 15 minute minimum
    - b. Simulator temperature is correct "Y", "N" will abort test
    - c. Invalid Sample, mouth alcohol is presumed to be present
    - d. External Standard is out of range (range .072-.088 inclusive)
    - e. Interfering Substances over a .010
    - f. Radio Frequency Interference
    - g. Calibration Error, internal standard not verified
    - h. Filter Error
    - i. Sample Outside 10% of their average
    - j. Ambient Fail, it cannot purge itself
    - k. Detector Overflow
    - l. System Won't Zero, it cannot zero itself
    - m. Fatal System Error, Temperature High, Temperature Low, Not Calibrated, Ram Error, Out of Service, Not Set Up
  - 3. Results expressed as grams of ethanol/210 liters of breath (g/210L)
  - 4. Collects data
    - a. Statistics used to support legislation

- b. Drinking locations to assist the Liquor Control Board
- 5. Washington Supreme Court has approved the DataMaster (State v. Ford, 1988)

## II. LEGAL ASPECTS

### A. DUI Statute (46.61.502) affirmed by State v. Brayman. (per se law)

- 1. A person is guilty of driving while under the influence of intoxicating liquor or any drug if the person drives a vehicle within this state:
  - a. And the person has, within two hours after driving, an alcohol concentration of 0.08 or higher as shown by analysis of the person's breath or blood made under RCW 46.61.506 or
  - b. While the person is under the influence of or affected by intoxicating liquor or any drug or
  - c. While the person is under the combined influence of or affected by intoxicating liquor and any drug.
- 2. 46.04.670 defines vehicle
- 3. State v. Day - public access
- 4. 46.04.015 defines alcohol concentration as
  - a. g/210L breath
  - b. g/100ml blood

### B. Physical Control Statute (46.61.504)

- 1. The statute is the same as DUI, except the person is in actual physical control of a motor vehicle
- 2. Applies wherever DUI applies
- 3. "Safely off the roadway" exception
  - a. Edmonds v. Ostby said it is a factual issue to be decided by the trier of fact

### C. "Driving After Consuming" (0.02 Law) (46.61.503)

1. Person guilty of driving or being in physical control of a motor vehicle after consuming alcohol if the person operates or is in actual physical control of a motor vehicle within Washington and
    - a. Is under twenty-one years of age
    - b. Within 2 hours of driving or physical control has an alcohol concentration of at least .020, but less than .080
    - c. A test over 2 hours may be used to show person was 0.02 or more within the 2 hours of driving or physical control
  2. Arrest for "Driving After Consuming" (0.02 minor law)
  3. Test on the DataMaster for evidence
  4. A misdemeanor
- D. Uniform Commercial Drivers Act
1. RCW 46.25.110, violation of the Act, mandatory, gross misdemeanor
    - a. Any person who drives, operates, or is in physical control cannot have any alcohol in their system
      - (1) Out of service for 24 hours, per CFR 392.5
    - b. If 0.04 or more, or refuse the test, their CDL will be disqualified
- E. Breath/Blood Statute (RCW 46.61.506)
1. A reading less than .080 may be considered with other evidence for determining if under the influence
  2. Breath based upon g/210L
  3. Testing methods approved by the State Toxicologist
  4. Blood test for alcohol or drug content
  5. Person has right to additional test
- F. Implied Consent (RCW 46.20.308)

1. Any person who operates a motor vehicle in the state of Washington is deemed to have given consent to test breath/blood for alcohol concentration or the presence of any drug.
2. Applies wherever DUI applies
3. Elements:
  - a. Driving or Physical Control of a motor vehicle within state of Washington (46.04.320 - motor vehicle = but not trains.)
  - b. Probable cause under the influence of alcohol, or the presence of any drug, or has alcohol in his/her system in a concentration of greater than 0.020 and was under the age of 21.
  - c. Lawful arrest
  - d. Implied Consent warning read
    - (1) License, permit, or privilege to drive will be revoked/denied if refuse to submit.
    - (2) License, permit, or privilege to drive will be revoked or denied if age 21 or more and 0.08 or more, OR if under age 21 and 0.02 or more.
    - (3) A bright line on refusals (DOL v. Lax, 1995). Once refused, no further testing by the officer needs to be done. The officer determines if a good faith attempt to provide a sample was made or if it is a refusal (condensation in the mouthpiece or sound and 'Please Blow' stops flashing). If in doubt about the sample acceptance of an instrument, the officer should run a TEST with his breath to check it. Report it along with the ticket copy for the hearings.
    - (4) Reading three times is sufficient.
    - (5) Must be read in language person understands.
    - (6) DOL request spell out place/city etc.
    - (7) For Commercial Motor Vehicle Driver, read complete Implied Consent, including gray area.
4. If a breath test is 0.080 or more (adult) or 0.020 or more (minor) or the person refuses the test, or .040 or higher for a Commercial Motor Vehicle Driver. (The results of both breath samples must exceed the limit), the officer shall...

- a. Serve the Driver's Hearing Request Information notice of DOL intent to revoke or deny the persons driver's license. (in the DUI Packet)
  - (1) Detach the Notice, the person must return it to DOL in 30 days with \$100 to schedule a hearing. Not necessary to read form to subject. Simply complete top two lines and the date on the bottom.
  - (2) The person detaches the very bottom of the Notice as it is the validation date for the person's 'marked' Driver's License.
- b. Mark driver's license, use the diamond punch by the DataMaster and punch the green rectangle at the top of the license where 'Driver's License' is printed.
  - (1) The marked driver's license is now a temporary valid for 60 days from arrest date or DOL issue date if blood taken. Temporary not valid any longer than any license it replaces.
- c. Submit to DOL in 72 hours the 'Report of Breath Test' or the 'Report of Refusal to Submit to Breath/Blood Test'.
  - (1) Submit 'Report of Blood Test' when you receive blood results from the State Toxicology Lab.

#### G. DOL Administrative Hearings

1. A civil proceeding
2. Held in county of arrest
3. To be from the officer's arrest report so his/her attendance is not needed. You may be required to attend if it involves a commercial motor vehicle driver. DOL will request your report if it's needed. Send it immediately in all requests.
4. Hearing within 60 days of the arrest or issuance of notice by DOL if blood. So by the time DOL knows they will have a hearing and need your report, time is very short. (usually 30 days or less)
5. A preponderance of the evidence. Officer's DUI arrest report under declaration and any other evidence accompanying the report shall be admissible without further foundation. Certifications authorized by criminal rules shall be admissible without further foundation.
6. No prosecutor except in Superior Court, will have Deputy AG.



7. Hearing Officer may issue subpoenas for attendance. If you want to attend it is okay with DOL if you notify them in advance.
8. Send a copy of your DataMaster ticket and a copy of the operator's permit card (front and back) with arrest report to DOL if they request your reports.
9. DOL Hearings format: Include the following in the your arrest report.
  - a. Adult
    - (1) Officer had reasonable grounds to believe the person had been driving or in actual physical control of a motor vehicle within this state.
    - (2) There was probable cause the person was under the influence of intoxicating liquor or any drug.
    - (3) Person was under lawful arrest.
    - (4) The Implied Consent warnings were read to the person.
    - (5) Additional:
      - (a) That the person refused to submit to the test required or
      - (b) If tested, consent was given or the person was tested without consent as permitted (special evidence warning); plus the person's breath/blood was 0.080 or more within two hours
  - b. Minor, under age 21
    - (1) Officer had reasonable grounds to believe the person had been driving or in actual physical control of a motor vehicle within this state
    - (2) There was probable cause the minor had alcohol in his/her system in a concentration of .020 or more and was under the age of 21
    - (3) Minor was under lawful arrest
    - (4) The Implied Consent was read to the person
    - (5) Additional:
      - (a) The minor refused to submit to the test required or

- (b) If tested, consent was given or the person was tested without consent as permitted (special evidence warning); plus the person was under age 21 and had a breath/blood result of more than .020 within two hours
- c. Commercial Driver
  - (1) The officer had reasonable grounds to believe the person had been driving or was in actual physical control of a commercial motor vehicle within this state while having alcohol in the their system
  - (2) The driver was lawfully arrested
  - (3) Commercial Implied Consent read
  - (4) The driver refused or had a reading of 0.040 or more
- d. You can send another officer's sworn report that contains probable cause about your case to help with your probable cause.
- e. DOL requests that if you run a DataMaster test for another officer, you only run the test, and let the arresting officer complete all the forms.

#### H. Case Law

- 1. The subject has a right to an attorney before the breath/blood test (State v Wakenight)
  - a. Right to have attorney actually present within 30 minutes. (State v Fitzsimmons)
  - b. The subject has a right to a private conversation with their attorney. (State v Koch)
    - (1) Need not jeopardize officer safety.
    - (2) Need not interrupt 15 minute observation however it probably will, so start 15 minutes over.
- 2. If the subject is to be detained and asks for additional test, he must be transported to a facility and be given the opportunity to get a test. (State v Reed)
  - a. If the subject claims to be indigent you must transport to a facility where they have the opportunity to get a test. The court will decide the indigent issue later. (State v Bartells)

- (1) RCW 46.61.506 states the failure or inability to obtain an additional test by a person shall not preclude the admission of evidence taken.
- b. If the person is to be released in a timely manner they may obtain their own test.
3. A sample blown into a defective instrument does not relieve the subject of the requirement to give a full test at another instrument. (Sunnyside v Sanchez)
4. If one of the two samples required to get a printout is refused it is a refusal. (DOL v Rogers, 1988)
- I. Breath test defined by WAC 448-13-040, State Toxicologist: Dr. Barry K. Logan
  1. 15 minute observation period. The person does not eat, drink, smoke, or vomit.
  2. No foreign substance in mouth.
  3. The simulator temperature was **34° C +/- .2° C**
  4. Two valid breath samples are required.
  5. The test results will be provided in the form of a printout.
  6. The results will indicate the grams of alcohol/210 liters of breath.
- J. WAC requires that for the admission of breath test results as evidence, the operator must testify about
  1. 15 minute observation period
    - a. To ensure that any alcohol in the person's mouth has time to dissipate before the samples are taken
    - b. The person does not have any foreign substances in their mouth. Such determination shall be made by either an examination of the mouth **or** a denial by the person that he/she has any foreign substances in the mouth
    - c. Upon checking the person's mouth for foreign objects before starting the 15 minutes clear the person's mouth of all objects except dental work, and if necessary have the person rinse their mouth. (i.e., chewing tobacco, etc.)
    - d. If the person puts anything into their mouth, smokes, or vomits the mouth must be rechecked and the 15 minutes started over.

- e. The mouthpiece and the subject's own blood are not foreign.
  - f. Tongue Jewelry: ask the subject to remove, if unable or unwilling then request a blood sample under the implied consent (other physical limitations language)
  - g. Vomiting or regurgitation may bring alcohol back up to the mouth and may require a new 15 minutes and instructions not to do it or they will be refused.
  - h. Observe the subject until the last sample is completed.
- 2. The simulator temperature must be **34° C +/- .2° C**
    - a. The solution in the simulator obeys Henry's Law. At a constant temperature, the simulator solution will provide known values. If the temperature is too high or low, the value of the solution will be outside the proper range.
    - b. The solution is prepared by the State Toxicology Laboratory.

### III. DUI ARREST REPORT

#### A. Constitutional Rights

- 1. Read it to a person acting unconscious.
- 2. Must get translator for non-English speaking subject, Spanish form available. Spanish tapes from court translator.

#### B. Implied Consent Warning for Breath

- 1. Officer signs on "Officer's Signature" line
- 2. Have defendant sign or write in 'refused to sign'.
- 3. Have defendant mark the YES\NO box.

#### C. Special Evidence Warning

- 1. Four times when blood can be taken without consent. If in doubt about who is driving, take blood from all suspects.
  - a. Vehicular Homicide
  - b. Vehicular Assault

- c. Unconscious (DUI / Physical Control / Minor Driver). If possibly “acting” unconscious read the form anyway.
  - d. DUI from an accident with serious bodily injury to another.
- 2. When taking blood at a hospital you must have probable cause.
  - a. Observations at the scene.
  - b. Information from a reliable informant.
    - (1) Officer at the scene
    - (2) Relay from Communications
- 3. Sample collection (State Toxicology blood kit, gloves)
  - a. Must be drawn by a physician, registered nurse, or qualified technician
  - b. Officer should be a witness to the drawing of the blood sample
    - (1) This may avoid the need for the nurse to be in court
    - (2) Document all critical information and qualifications regarding person who drew blood sample
  - c. Must be placed in a grey top tube
    - (1) Tubes available from State Toxicology Lab
    - (2) Check blood tube expiration date
    - (3) White powder (anti-coagulant) in tube, not empty
    - (4) Record evidence information on tube
    - (5) Record evidence and chain of custody information on form
    - (6) Use only Toxicology Laboratory mailing kit to mail tubes to lab
      - (a) Postal regulations
      - (b) Does not need to be refrigerated

(7) Do not touch blood, prevents communicable disease

4. Hospital analysis is not approved by the State Toxicologist
  - a. Use ONLY the State Toxicology Laboratory for analysis
  - b. Toxicology Laboratory uses whole blood, the hospitals use blood plasma

D. Implied Consent Warning for Blood

1. Blood is the only legally acceptable alternative when breath is impractical.
2. Emergency medical vehicle and ambulance added to hospital or clinic for blood drawing.
3. Accident clause removed
4. When person is incapable of providing breath sample or you have PC the person is under the influence of drugs, read them the Implied Consent for Blood.
5. When person has interferant test, give one more test and if interferant again, invoke Implied Consent for Blood (other physical limitations language). There will not be a printed document with an interferant test, not a valid test.
6. Ask hospital if there is a state certified and maintained instrument in the hospital. Instructors may teach that there are no state DataMasters in the local hospitals or clinics, certified for evidential breath testing. Check box located at bottom of Implied Consent For Blood form.
7. Read it to a supposedly unconscious person, if really unconscious use the Special Evidence Warning.

E. Voluntary Blood, Urine, or Breath Test

F. DUI Interview

1. Statement in question form.
2. First and last drink times
3. Note all answers, statements or sayings.
4. Note if invokes right to silence, defense will ask about blanks on forms.

5. Observations

- a. Be specific for subject arrested, don't generalize.

G. Sobriety Tests

1. Divided attention tests.

- a. Horizontal Gaze Nystagmus
- b. One-Leg-Stand
- c. Walk and Turn

2. Other tests may be used and noted.

3. PBT, Pre-Arrest Breath Test

- a. Must be voluntary, may be used to assist in determining probable cause and used in probable cause hearings but cannot be used in a trial as evidence
- b. Does not satisfy Implied Consent for DUI, Commercial Drivers, or Minors
- c. Very important part of probable cause and your case

IV. ALCOHOL PHYSIOLOGY REVIEW

A. Alcohol mixes readily with body water

B. Alcohol is absorbed without being changed chemically

C. Alcoholic beverages have differing alcoholic concentrations (by volume)

- 1. Beer - 4 percent. (3.2 % by weight)
- 2. Wine - 12 to 15 percent.
- 3. Hard liquor (50 to 100 proof) - 25 to 50 percent.

D. Alcohol is absorbed mostly by the small intestine.

- 1. Food impacts absorption, lowers peak

- E. Blood flow will distribute alcohol throughout body.
  - 1. Alcohol is a small molecule that easily enters the brain.
- F. The liver will metabolize about 95 percent of the alcohol consumed.
- G. Alcohol absorption - elimination curve and where extrapolation comes to play.
- H. Isopropyl or methyl alcohol
  - 1. Very toxic, very low dose tolerated
  - 2. Isopropanol turns into acetone and stays with you a long time.
  - 3. Methanol turns into formic acid and can cause blindness.

## V. THE PRE TEST PERIOD

- A. Check the RFI antenna.
  - 1. If there is no antenna, advise WSP radio and go to a different instrument.
- B. Check the breath tube.
  - 1. It should be warm/hot to the touch.
  - 2. The breath tube should be upright/forward of the back of the instrument.
  - 3. If it is cold, advise WSP radio and go to a different instrument.
- C. Check the simulator temperature.
  - 1. It must be **34° C +/- .2° C**, if it is not in range:
    - a. Check to see that the simulator is turned on. If it's off, turn it on, and recheck the temperature in 10-15 minutes. If it is still out of range, call WSP radio and tag out of service.
  - 2. Be able to draw the graduations on a thermometer, you should be able to do it in court.
  - 3. Look at the paddle to be sure it's turning. If it is not turning, advise WSP radio and go to a different instrument.
  - 4. Check that the simulator tubing is not kinked.



- D. Check the instrument time.
  - 1. It will disappear once "RUN" is pushed.
  - 2. It may be different than your watch.

## VI. THE OBSERVATION PERIOD

- A. Miranda Rights and Implied Consent.
- B. Check subject's mouth and begin the 15 minute observation using the DataMaster clock. Record time to the exact minute observed.
- C. You must keep subject under observation while entering the data.
- D. Make a note if subject has odor of volatile organic compounds (e.g., paint, thinner, etc.) about his person or clothing. If noted, determine time of last exposure.

## VII. INSTRUMENT OPERATION

- A. When 15 minute observation period is complete push "RUN".
- B. "INSERT TICKET"
  - 1. Straight, face-down, notch to the right, into the bottom slot. Colored side up.
  - 2. If there is already a ticket in the instrument you need not put a new one in.
- C. Enter data
  - 1. Accuracy is important
  - 2. When the observation time question appears, the time you enter must be a minimum of 15 minutes or the instrument will abort the test.
  - 3. First question is Simulator Temperature (**34°C** +/- **.2°C**) Y/N? If "no", the DataMaster will abort the test. **LOOK** at the thermometer when you answer the question.
  - 4. Operator's name
    - a. Last /First/MI
    - b. Always enter name the same with each use

5. Enter subject's name as it is on their driver's license. Emphasize the slash between the names
6. Use backspace, control X, and delete to correct errors.
7. You have 5 minutes to enter each data item and one minute to answer each Y/N question.
  - a. If the time expires, the display will show "READY- PUSH RUN" and all data is lost. Start over.

#### D. Review data

1. One minute to answer "REVIEW DATA, Y/N?"
2. Always review the data if any doubt about accuracy.
3. Use "backspace" and "control I" (moves cursor forward) to move cursor in review mode.

#### E. Purging

1. Air is drawn through breath tube to flush chamber. If the purge is unsuccessful, the display will read "AMBIENT FAIL".
  - a. Chamber vented out back of instrument.
  - b. Keep breath tube upright/forward - away from vent.
  - c. Some fail to purge causes:
    - (1) Mouthpiece left in breath tube.
    - (2) Room odor; alcohol/chemical odor (fingerprint ink, WD40)
    - (3) Subject's clothes soaked in alcohol.
    - (4) Subject with alcohol odor on breath near breath tube while it is trying to purge.
  - d. Start test over, use previous data.

#### F. Ambient Zeroing

1. Very small adjustment possible.
2. If large adjustment required - "SYSTEM WON'T ZERO".
  - a. "SYSTEM WON'T ZERO" does not mean the instrument is broken. Something prevented a complete purge of the sample chamber.

G. Blank Test

1. Displays .000

H. Internal Standard

1. A quartz plate that checks the instrument calibration internally.
2. If check is unsuccessful - "CALIBRATION ERROR".

I. "SUBJECT REFUSE Y/N?"

1. A beep will sound to alert operator to respond
2. One minute to select Y or N
  - a. "Y" results in a "refused" breath test document. Yes, the subject refused.
  - b. "N" results in request for sample

J. "PLEASE BLOW"

1. Put mouthpiece in when "PLEASE BLOW" appears - not before.
2. Open the plastic bag carefully, so that plastic does not get into the instrument.
3. Use the plastic bag to handle the mouthpiece, this helps prevent communication of disease.
4. Instruct the subject and watch the display
  - a. "Blow steadily into the mouthpiece 10 to 15 seconds, I will tell you to stop."
  - b. Consistent coaching will yield consistent samples.

- c. The blow need only be strong enough to stop "PLEASE BLOW" from flashing, but should be as long as possible. A sound will accompany the blow when air is traveling thru the sample chamber.
- d. A hard blow will not be accepted.
- e. Start/stop blowing or sucking, will not be accepted and may cause "INVALID SAMPLE".
  - (1) You must assume caused by mouth alcohol.
  - (2) Check subject's mouth and wait 15 minutes - then start again, you will not be able to use previous data.
  - (3) "INVALID SAMPLE" will appear in the database.
  - (4) "INVALID SAMPLE" does not mean that the instrument is broken - the sample offered was unacceptable.
- 5. As soon as the sample is accepted, REMOVE the mouthpiece using the plastic bag for protection.
  - a. A mouthpiece left in the breath tube restricts the flow of purging air and may result in "Ambient Fail".
- 6. The alcohol reading will not appear on the display, wait for the document.
- 7. If, after TWO minutes of "PLEASE BLOW", a sample has not been accepted the display will read "SUBJECT REFUSE Y/N?".
  - a. "Y" response gives a "REFUSAL" document.
  - b. "N" response gives an "INCOMPLETE" document.
  - c. No response at all will give an "INCOMPLETE" document after 1 minute.
  - d. The officer must decide whether the subject is unable or unwilling to provide a proper sample and be able to articulate the cause/facts for his/her reasoning in the arrest report.
    - (1) If unable, end test with an "INCOMPLETE", then proceed with the Implied Consent Warnings for Blood.

- (2) If unwilling, end test with a "REFUSAL". Be able to articulate the reasons for a refusal.
- e. Distribute these documents as you would a complete test document.
8. If "INTERFERENCE DETECTED" appears on the display:
  - a. Try one or more test
  - b. If "Interference Detected " occurs again, see Implied Consent for Blood
- K. Analyzing
  1. The breath sample is being tested.
- L. Purging - Ambient Zeroing - Blank Test .000
- M. External Standard (the simulator solution).
  1. Must be .080 +/- .008 (.072 to .088, inclusive).
  2. "EXTERNAL STANDARD OUT OF RANGE" will appear on the display and the test will abort if the external standard is less than .072 or more than .088.
  3. Simulator is to remain on. Do not disconnect or interfere with hoses in back of the instrument. Kinked hoses cause low external standard.
- N. Analyzing
  1. The external standard value will be on the display after it is analyzed.
- O. Purging - Ambient Zeroing - Blank Test .000
- P. "SUBJECT REFUSE Y/N?"
  1. If "N", subject supplies second sample.
  2. If "SAMPLES OUTSIDE 10%" appears on the display, the test aborts as the two samples are not within 10% of their average.
    - a. Not a valid test, run the test again.
    - b. Do not need to check mouth or wait an additional 15 minutes, but continue to keep subject in your direct observation.

- c. Will be in the database.
- d. Consistent instruction is important to obtain consistent samples.

Q. Analyzing - Purging - Blank Test .000

R. Breath Test Document.

- 1. Instrument serial number and software version near the top.
- 2. The reading is to three digits i.e., .128g/210L
- 3. Sign it and distribute to the defendant, court, officer.
- 4. If breath test document is jammed or garbled, secure the instrument and notify WSP radio. A copy can be obtained as long as "scratch pad" has not been erased.
  - a. Do not push "RUN".
  - b. Tape note over display, "OUT OF SERVICE - Copy Needed".
  - c. The test results are not admissible without an evidence document.
    - (1) You can't testify to what you saw.
    - (2) You can't testify from the statistical database.
  - d. Notify WSP of specific problem, leaving your name, agency, phone number, instrument serial number.

S. If test result .250 g/210 L or more, wait ½ hour and retest. If the reading goes up, provide the subject with an opportunity to seek medical attention.

T. Message Codes - a complete list with procedures to follow will be displayed at the instrument location.

- 1. "DETECTOR OVERFLOW"
  - a. Try one or more tests. If it occurs again, call WSP and tag instrument "Out of Service".

## VIII. ALCOSENSOR III PRE-ARREST BREATH TEST INSTRUMENT (PBT)

### A. Introduction

1. The PBT can be a very useful tool for establishing probable cause to arrest for DUI
2. The PBT can also be useful for enforcing "minor in possession" laws
3. The PBT is not the evidential breath alcohol test under the implied consent law since it is voluntary and typically performed prior to arrest
4. Only the AlcoSensor III PBT instrument is approved in the Washington Administrative Code. If your agency uses a different PBT instrument you must contact the State Toxicology Laboratory to determine its acceptability for use.
5. Following your successful completion of this course you will be certified operators of both the DataMaster and the AlcoSensor III PBT. Refresher classes will renew your operator status with regard to both instruments.

### B. Nomenclature

1. Temperature display
2. Set button
3. Read button
4. Digital display
5. Breath intake port
6. Mouthpieces (straight white and clear with saliva trap)

### C. Theory of Operation

1. The instrument uses a fuel cell to detect and quantify ethyl alcohol
2. The fuel cell oxidizes the alcohol which releases electrons available for an electrical current flow that is proportional to the concentration of alcohol
3. The current flow is measured and becomes an index of alcohol concentration
4. The results are shown on a digital display

#### D. Steps of Operation

##### 1. Preliminary Considerations

- a. The PBT is usually the last test administered along the roadside
- b. After determining the subject's willingness to do the test, the question must be asked: "Have you consumed any alcohol in the last fifteen minutes?"
- c. If subject acknowledges alcohol consumption in the last fifteen minutes then a test should not be administered unless willing to wait fifteen minutes. This may not be practical and the decision to arrest will need to be based on other information.
  - (1) The purpose of the 15 minute wait is to guard against mouth alcohol
  - (2) Might look for open containers in vehicle to corroborate subject's statement about drinking or not drinking within last 15 minutes and make a note of it

##### 2. Check the temperature display, it should be 20-36<sup>0</sup> C

##### 3. Push the "Set" button

##### 4. Push and hold the "Read" button and confirm that the displayed results go down to 0.003 or less and remain there. If not, push the "Set" button again and then push and hold the "Read" button. You may have to wait a few minutes for this to be accomplished.

##### 5. Push the "Set" button

##### 6. Attach the mouthpiece in one of the following configurations:

- a. Attach the clear saliva trap mouthpiece to the straight tube white mouthpiece. Next, attach the straight white mouthpiece to the breath intake port. Have the clear saliva trap mouthpiece facing to the opposite side of the instrument display.
- b. Attach the straight white mouthpiece with one-way valve in the proper direction so that the breath will flow in the proper direction. Reversing the direction will mean that the subject will not be able to exhale into the mouthpiece.
- c. Demonstrate these configurations to the students.
- d. Use plastic bags when handling (attaching, removing and disposing of) mouthpieces.



7. Have subject blow at least a 5 second sample. While the subject is still blowing press and hold the "Read" button. This will obtain that last sample of breath. Keep subject at a safe distance and remember officer safety issues. Monitor flow with back of hand to ensure subject does not suck back (this will not be necessary if using a mouthpiece with a one-way valve).
8. Keep the "Read" button depressed and observe the displayed result until the peak value is obtained. This may take up to 45 seconds or longer. This is very important to obtain an accurate result.
9. Record the results to three decimal places in your case report.
10. Note also in your case report the serial number or the state tag number of the PBT instrument.
11. Remove and discard the clear saliva trap mouthpiece or the white mouthpiece with one-way valve using the plastic bag to handle. The white tube mouthpiece (without one-way valve) can be reused but should be discarded after approximately ten tests or when becoming saturated with moisture or debris after multiple tests.
12. Press the "Set" button and LEAVE in this position until next use.

E. Additional Considerations

1. It may take up to five minutes to zero between tests on the PBT. The manufacturer recommends no more than five tests per hour when results are near 0.10. If many low tests (near zero results) are run in a row, over five tests per hour is acceptable.
2. If the PBT displays "888" this means the battery is low. Contact your local PBT Technician for a battery replacement. The battery can last up to 500 tests.
3. The PBT should be stored where it will not encounter extreme heat or cold.
4. Radios should not be transmitted near the PBT when in operation. These signals may bias the test results. Watch for the continuous smooth rise in the results.
5. The PBT instruments must be tested at least every 6 months by a responsible technician. It is very important that you provide your instrument to the technician so this can be done and records kept. This will be important if your results are to be admissible in a probable cause hearing. The instruments can be checked more frequently by the technician and you may want to have this done following a significant arrest where the PBT will be critical evidence. The Technician will use a gas standard.

6. Generally, the PBT test results alone should not be the sole basis for the decision to arrest. However, there may be the circumstance (e.g., accident) where it is the sole basis for probable cause.
7. A negative PBT test result can help add to the probable cause to believe that the subject is on some other drug and a Drug Recognition Expert (DRE) should be called.
8. Do not allow any samples to be provided by an individual who has been smoking within three minutes. Smoke will ruin the fuel cell costing nearly \$250. When properly used, the fuel cell should last up to 3000 tests.
9. The most common problems encountered with PBT use are:
  - a. Allowing someone to smoke and then blow into the PBT within 3 minutes
  - b. Breaking off the mouthpiece tip on top of the instrument
  - c. Leaving the PBT on the vehicle and then driving off and losing or driving over it
  - d. Failing to keep the READ button depressed long enough to obtain a peak value
  - e. Not obtaining a deep lung sample
10. There are three questions related to the PBT that must be answered on the DataMaster
  - a. PBT TEST GIVEN? (Y/N):
    - (1) If "N", the next two questions will not appear
    - (2) If "Y", then
      - (a) PBT TIME:
        - i) Use military time
      - (b) PBT RESULT:
        - i) The decimal is automatic, report to three digits

#### F. Practical Tests

1. Set up simulators for doing the PBT practical tests.

2. Have either the student or a partner provide samples using the simulators.
3. When using simulators, have student hold PBT on side or upside down to keep water from entering the fuel cell. Demonstrate this to students.

## IX. CASE REPORTS

- A. Clear, thorough and complete case reports are very important.
  1. Case can stand alone on the case report.
  2. Substantiating evidence as driving, physical test, observations, statements.
  3. Be sure to include all information DOL needs for a hearing so you do not have to appear for their civil hearings.

## X. REVIEW

- A. Court Testimony.
  1. Primary evidence is your case report.
  2. DataMaster uses infrared energy to analyze the sample.
  3. The breath tube should be warm or hot to the touch.
  4. The RFI antenna was present.
  5. Simulator temperature (**34°C +/- .2°C**).
    - a. Be able to draw thermometer.
    - b. Be able to say the paddle was turning.
  6. 15 minute observation.
  7. Followed directions on the display.
  8. External standard (0.072 - 0.088 inclusive).
  9. Signed breath test document.
  10. Current defense tactics.

11. When asked in court what you were taught in class, state to the effect: The four hour DataMaster and PBT Refresher Course consists of a lecture, a practice session, a written exam, and a practical exam. The class covers legal aspects of breath testing, the theories upon which the DataMaster and PBT operate, and detailed instructions on operating the DataMaster and PBT.

#### XI. WRITTEN AND PRACTICAL EXAM

- A. 80% on written.
- B. Satisfactory practical exercise.

06/01/2000